

Table of Contents

Chapter 1: Getting Started with BIG-IP	1-1
The BIG-IP System	1-1
Licensing, Provisioning and the Setup Utility	1-6
Backing Up and Restoring the BIG-IP Configuration	1-22
F5 Support Resources and Tools	1-23
Chapter Resources	1-28
Understanding Lab Instruction Notation	1-29
BIG-IP Discovery Lab	1-32
Chapter 2: Traffic Processing with LTM	2-1
Overview of LTM Traffic Processing	2-1
Configuring Virtual Servers and Pools	2-7
Load Balancing Concepts	2-9
Traffic Statistics and Logs	2-12
Lab – Virtual Servers and Pools Lab	2-17
Chapter 3: Secure Network Address Translation (SNAT)	3-1
SNAT Functionality	3-1
Lab - SNAT Automap Lab	3-7
Chapter 4: Traffic Management Shell and Managing the BIG-IP Configuration	4-1
Traffic Management Shell (tmsh)	4-1
BIG-IP Configuration State and Files	4-10
Introducing Archives	4-12
Chapter Resources	4-18
Lab – tmsh Configuration Labs	4-19

Chapter 5: Monitors and the Network Map.....	5-1
Monitor Concepts	5-1
Monitor Configuration.....	5-5
Monitor Assignment	5-8
Monitor Status Reporting	5-12
The Network Map	5-16
Lab – Configure Monitors Lab	5-18
Chapter 6: Profiles	6-1
Introduction to Profiles.....	6-1
Profile Types and Dependencies	6-3
Configuring and Using Profiles.....	6-5
SSL Termination	6-7
Chapter Resources.....	6-11
Lab 6.1 – Client SSL Profile	6-12
Chapter 7: iApps	7-1
Introduction to iApps.....	7-1
Application Services.....	7-3
Templates	7-5
iApps Ecosystem on DevCentral	7-7
Lab – iApps Lab	7-8
Chapter 8: Troubleshooting BIG-IP	8-1
F5 Support Services and AskF5	8-1
BIG-IP iHealth and QKView Diagnostic Files.....	8-6
Using tcpdump in a BIG-IP Environment	8-13
Logging and Notification	8-20
SNMP Features.....	8-25
Chapter Resources.....	8-29
Lab 8.1 – Remote Syslog Lab.....	8-30
Lab 8.2 – SNMP Trap Lab.....	8-31
Lab 8.3 – Troubleshooting Lab.....	8-33
Lab 8.4 – iHealth Lab	8-34

Chapter 9: BIG-IP Product Family	9-1
Overview of the BIG-IP Product Family	9-1
DNS and GTM System Options	9-2
ASM as a Web Application Firewall.....	9-8
APM and Secure Access	9-16
BIG-IP Product Traffic Processing.....	9-19
Chapter 10: Persistence and Configuration Object State	10-1
Persistence Concepts	10-1
Source Address Affinity Persistence	10-4
Cookie Persistence	10-8
Lab 10.1 – Source Address Affinity Persistence	10-10
Lab 10.2 – Cookie Persistence.....	10-13
Configuration Object Management	10-17
Lab 10.3 – Object State and Persistence	10-23
Chapter 11: High Availability	11-1
High Availability Concepts	11-1
Traffic Group and Device Groups	11-3
Synchronization, State, and Failover	11-10
Device Group Communication.....	11-14
Chapter Resources	11-17
Lab – High Availability and Device Group Lab	11-18
Chapter 12: BIG-IP Administration	12-1
Basic Network Configuration.....	12-1
Restricting Network Access	12-11
User Roles and Administrative Partitions.....	12-16
Always On Management (AOM)	12-22
License Dates and Upgrade Considerations	12-23
BIG-IP Software Management	12-26
Chapter Resources	12-36
Lab 12.1 – Admin Partitions and Users Lab	12-37
Lab 12.2 – Packet Filters Lab (optional).....	12-41
Lab 12.3 – AOM IP Address Lab (optional)	12-45

Chapter 13: Enterprise Manager.....	13-1
Introduction to Enterprise Manager.....	13-1
Managing Devices.....	13-5
Custom Lists.....	13-6
Enterprise Manager Tasks.....	13-7
Enterprise Manager and iHealth.....	13-12
Managing Archives from Enterprise Manager.....	13-13
Lab – Enterprise Manager Lab.....	13-15
 Chapter 14: iRules	 14-1
iRules Concepts.....	14-1
iRules Events.....	14-3
Lab – iRules Lab.....	14-6
 Appendix A: Complete Setup Lab Instructions.....	 A-1
Lab 1.1 – Configure Management IP Address.....	A-1
Lab 1.2 – Licensing, Provisioning and Setup	A-5